Appendix A 5kHz CHANNEL PLAN AND STACKING

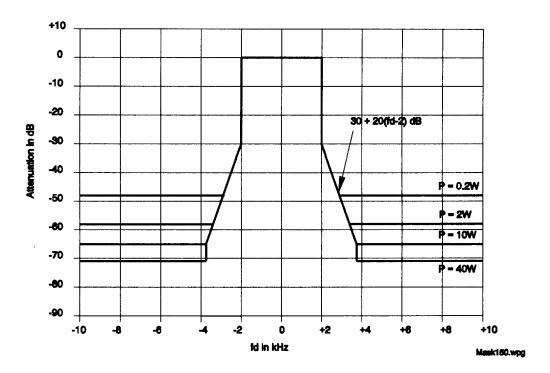


Figure A-1: FCC proposed emission mask for 150-174 MHz

Figure A-1 shows the Notice's proposed emission mask for the 150-174 MHz band. SEA proposes this mask be adopted for all bands below 512 MHz.

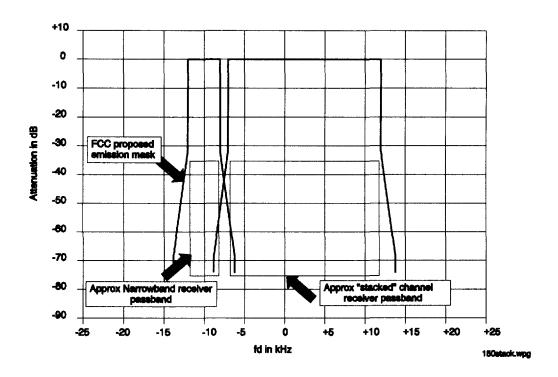


Figure A-2: Channel stacking using proposed emission mask

Figure A-2 illustrates how the emission mask permits adjacent channel operation between a narrowband and a "stacked" channel.

Appendix B TRANSITION PLAN USING REDUCED DEVIATION ANALOG FM

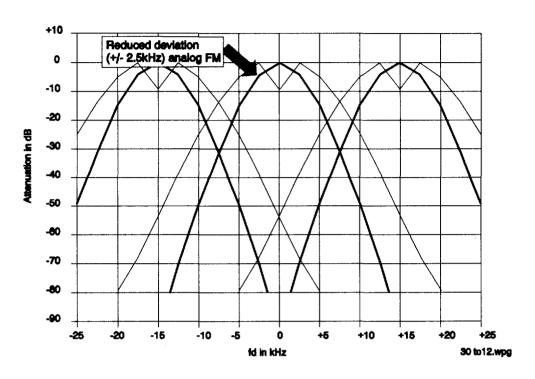


Figure B-1: Effect of deviation reduction, 150 MHz

Figure B-1 is a composite spectrum plot which illustrates the effect of reducing the deviation of (geographically-separated) 15 kHz spaced analog FM channels in the 150-174 MHz band.

Figure B-2 illustrates how the deviation reduction would not reduce adjacent channel emissions sufficiently to eliminate the geographic restriction between 15 kHz-spaced analog FM stations.

exist with new technology or narrowband channels (NB1, NB2, and NB3). FM3, operating on a 15 kHz channel, will not fit inside the emission mask for a stacked bandwidth made up of three 5 kHz channels. FM3 really requires five-5 kHz channels stacked together to protect the nearest adjacent narrowband neighbor.

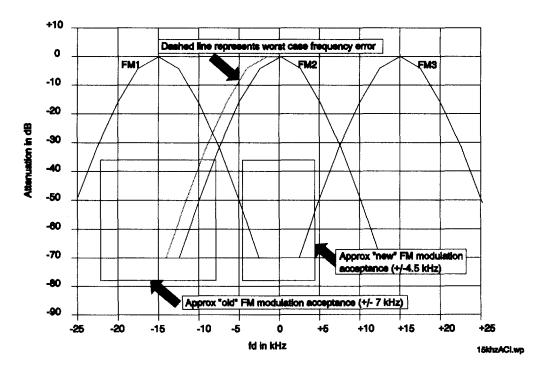


Figure B-2: Adjacent channel vulnerability of "old" receivers, 150 MHz

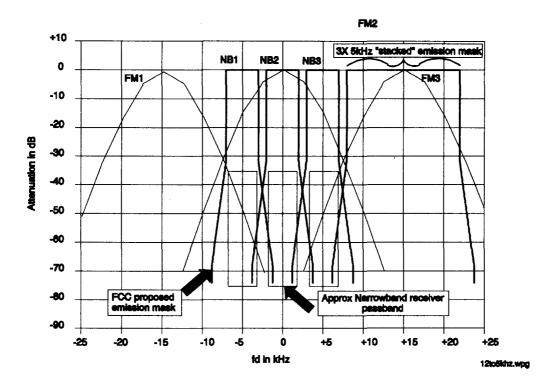


Figure B-3: Adjacent channel vulnerability of narrowband receivers, 150 MHz

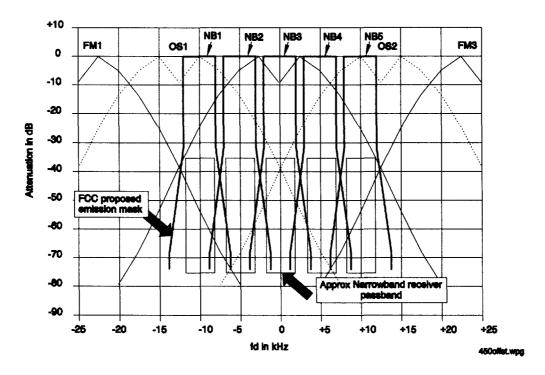
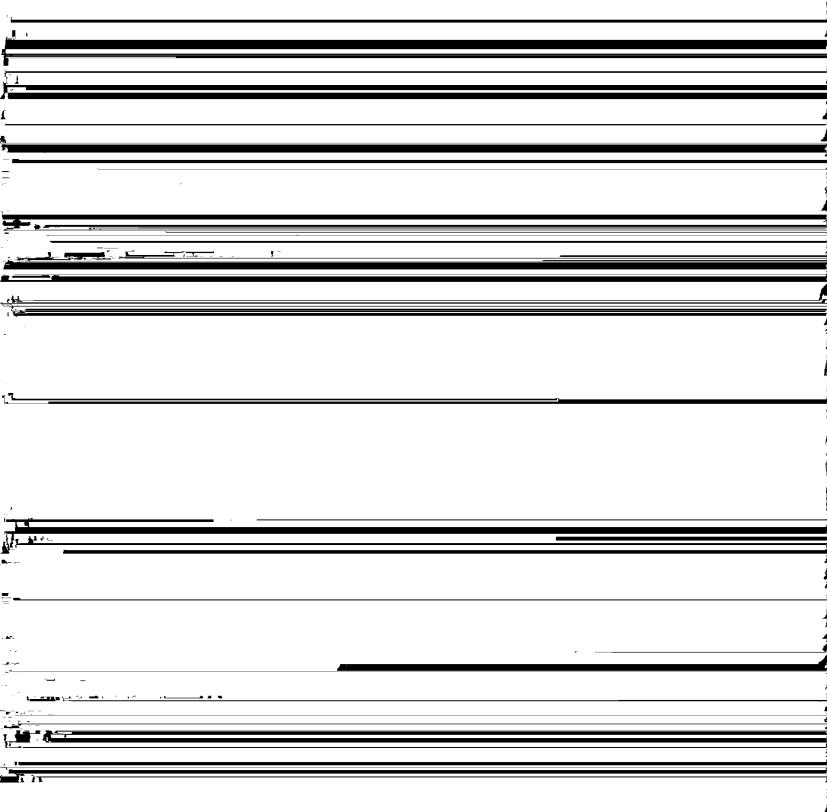


Figure B-4: Relationship of 5 kHz narrowband (or equivalent) transmitters to 450 MHz offset channels

Figure B-4 shows how the spectrum used by primary channels at 450 MHz might be turned into multiple 5 kHz channels. Unfortunately, if the offset channels (OS1 and OS2; shown in dashed lines) are to remain in service with no prompting to convert to new technology/narrower bandwidth, they will be highly susceptible to interference. The Commission's proposal to permit the offsets to remain licensed on a secondary basis will provide only



CERTIFICATE OF SERVICE

I, Norma E. Rusnak, a secretary for the law firm Verner, Liipfert, Bernhard, McPherson and Hand, Chartered, do hereby certify that a true and correct copy of the foregoing "Comments of SEA, Inc." was delivered by hand, this 28th day of May, 1993, to the following:

Commissioner James H. Quello Federal Communications Commission 1919 M Street, N.W., Room 802 Washington, D.C. 20554

Commissioner Andrew D. Barrett Federal Communications Commission 1919 M Street, N.W., Room 844 Washington, D.C. 20554

Commissioner Ervin S. Duggan Federal Communications Commission 1919 M Street, N.W., Room 832 Washington, D.C. 20554

Ralph Haller, Chief Private Radio Bureau Federal Communications Commission 2025 M Street, N.W., Room 5002 Washington, D.C. 20554

Mama E. Musnak